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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,515	12/20/2004	Dietmar Fauser	0518-1082-1	8388
<sup>465</sup> YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			<div>EXAMINER</div> <div>JOSEPH, TONYA S</div>	
			<div>ART UNIT</div> <div>3628</div>	<div>PAPER NUMBER</div>
			<div>NOTIFICATION DATE</div> <div>11/16/2009</div>	<div>DELIVERY MODE</div> <div>ELECTRONIC</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

### Office Action Summary

**Application No.**

10/518,515

**Applicant(s)**

FAUSER ET AL.

**Examiner**

TONYA JOSEPH

**Art Unit**

3628

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21, 22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/14/2009 has been entered.

### ***Status of Claims***

Claims 21-29 have been previously examined. Claims 21-22 and 25-29 have been amended. Claim 23 has been cancelled. Thus, claims 21-22 and 24-29 are presented for examination.

### ***Response to Arguments***

Applicant's arguments filed 08/14/2009 have been fully considered but they are not persuasive.

1. In response to applicant's argument that Barlow proposes changes for financial reasons whereas the instant invention has technical objectives, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

2. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

3. Applicant further argues that the reassignment of Applicant's invention is performed by simultaneously choosing from two lists at the same time. The Examiner disagrees. Applicant's specification describes choosing from a FSR or the current schedules in the alternative. Specifically, Applicant's specification teaches:

The reservation system automatically selects a reassignment option (for each change of scheduling requiring it). This option is selected from among the future schedules FSR or the current schedules (for flights not affected by the group in progress) (see para. 69)

Accordingly, Applicant's arguments are not persuasive and the rejections are maintained.

***Claim Rejections - 35 USC § 101***

4. Claims 21-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. Claims 21-29 are directed to a "method" and therefore are considered process claims for the purposes of § 101. To qualify as statutory subject matter, a claimed process must either: (1) be tied to a particular machine or apparatus or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). Thus, to qualify as patent eligible, these processes should positively recite the other statutory class to which it is tied (e.g., by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g., by identifying the product or material that is changed to a different state). Claims 21-29 identify neither the apparatus performing the recited steps nor any transformation of underlying materials, and accordingly are directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 21-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

8. Applicant has amended the independent claim to recite, "wherein the current schedule record is a record that remains unchanged by the applying changes in the flight schedule database". Applicant has cited para. 69 in the original specification as filed for corresponding support. The Examiner disagrees. The cited paragraph does not provide sufficient support for the newly added limitation and accordingly, it is considered new matter.

**Examiner Notes:** If Applicant insists that the specification as filed provides adequate support for this feature, Applicant is requested to indicate the sections and line numbers where explicit support can be found in the reply to this Office Action.

Applicant has not challenged Examiner's use of Official Notice with respect to the subject matter of claims 24-26 and 29. Thus, the Examiner's use of Official Notice of the pertinent facts is considered admitted prior art.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 21-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 21 recites, "wherein a reservation system selects a reassignment option, said option being selected from the future schedule record (FSR) or the current schedule record, wherein the current schedule record is a record that remains unchanged by the applying changes in the flight schedule database". Applicant's claim further limits the current schedule record, when it is only required in the alternative. For

Examination purposes, the Examiner is interpreting the amendment to be not further limiting.

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claim 26 recites the limitation, "...determining for each extracted change a corresponding flight periods...and upon further determination that said corresponding flight periods have...". The plain meaning is unclear, for examination purposes the Examiner is interpreting the flight periods to be singular.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 21-22, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1.
16. As per Claim 21, Barlow teaches receiving at least one batch of flight schedule changes at a Schedule Loader server (SLS) (see Col. 2 lines 28-34 and Col. 3 lines 1-10);

extracting the changes contained in the batch and storing said changes as a set of Future Schedule Records (FSR) which are stored as temporary data available for passenger re- accommodation purpose (see col. 2 lines 28-34 and Col. 3 lines 51-54); publishing the future schedule records (FSR) on a reservation distribution server (see Col. 3 lines 51-54); Barlow does not explicitly teach the limitation taught by Slivka simulating passenger re-accommodation options to determine the best re-accommodation option for each passenger among said future schedule records (FSR) and the data of the flight schedule database (see para. 27 and 44); applying the changes in the flight schedule database by: detecting dependent re-accommodation options by checking whether some of the best re- accommodation options are comprised in said future schedule records (FSR) (see para. 52) ; and updating the flight schedule database starting with the future schedule records (FSR) comprising dependent re-accommodation options (see para. 36 and 45); and updating the reservation inventory database according to the re-accommodations determined during the simulation step (see para. 45). wherein a reservation system selects a reassignment option, said option being selected from the future schedule record (FSR) or the current schedule record, wherein the current schedule record is a record that remains unchanged by the applying changes in the flight schedule database (see para. 45).



It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Slivka to accommodate a disrupted passenger.

17. As per Claim 22, Barlow in view of Slivka teach the method of claim 21 as described above. Barlow further teaches a accessing via a Graphical User Interface access and set up automation criteria for processing each batch of flight schedule changes (see Fig. 6), for verification of the changes extracted from the batch of changes (see Col. 5 lines 30-39) and for the validation of the reservation re-accommodations (see Col. 5 lines 48-58). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to further include the teachings of Slivka to accommodate a disrupted passenger.

18. As per Claim 28, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the limitation taught by Slivka wherein in a case of cyclical dependence between several records, upon the execution of the re-accommodation operations in the reservation system, each reservation in question is modified only once by the assembly of these reassignments (see para. 46). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Slivka to efficiently process a re-accommodation request.

19. Claims 24-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in further view of Official Notice.

20. As per Claim 24, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach a characteristic suffix (SL) is assigned to the changes and stored as future schedule records (FSR). Official Notice is taken that assigning a suffix to delineate data is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow and Slivka to include the teachings of Official Notice to delineate various data elements from one another.

21. As per Claim 25, Barlow in view of Slivka teaches the method of claim 24 as described above. Barlow further teaches wherein an argument is assigned to each record (FSR), said argument indicates whether this record (FSR) has been made accessible to the reservation distribution server (see Col. 2 lines 16-24, Examiner is interpreting the CSR being able to make evaluations as an indication that a record has been made accessible).

22. As per Claim 26, Barlow in view of Slivka teaches the method of claim 25 as described above. Barlow further teaches determining for each extracted change a corresponding flight periods of the flight schedule database (see Col. 2 lines 55-60); and upon further determination that said corresponding flight periods have not already been affected by one change whose argument is positive (see Col. 5 lines 45-65); perform the further steps of:

sending a scheduling change message (see Col. 4 lines 25-32); indicating that the change is a record accessible to the reservation distribution server, by placing its argument (FSR is published) in the positive state (see Col. 4 lines 40-45, Examiner is

interpreting the CRS executing options as having accessed a change record). Barlow does not explicitly teach said period is duplicated and the suffix (SL) is assigned to the duplicated period. Official Notice is taken that duplicating a period and assigning an identifier to note the change is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Official Notice to denote a change. The limitation, "to integrate the change in the duplicated period that it affects" is merely a statement of intended result and as such is afforded little patentable weight.

23. As per Claim 29, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the records (FSR) are deleted after final updating of the flight schedule and the reservation inventory databases. Official Notice is taken that deleting data after it has been applied is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the methods of Barlow and Slivka to further include the teachings of Official Notice to free up storage space.

24. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in further view of Shetty et al. U.S. Pre-Grant Publication No. 2003/0191678 A1.

25. As per Claim 27, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the limitation taught by Shetty wherein upon simulation of re-accommodation, a degree of dependency is attributed to each record as a function of the number of other records in cascade for which an

application of said record gives rise to a re-accommodation of the reservations on said other records (see para. 5-6). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the methods of Barlow and Slivka to include the teachings of Shetty to determine a least cost solution schedule.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri, 7:30 am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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/JOHN W HAYES/  
Supervisory Patent Examiner, Art Unit 3628